



### Drought Conditions Prevail

#### January - March

Extreme drought conditions continued into the New Year with over 99 percent of the State rated abnormally dry or worse drought classifications according to the U.S. Drought Monitor. This drought level did not change or waiver until mid-March when rainfall brought some relief to windward slopes and coasts. However, drought conditions for the leeward coasts, especially on Hawaii Island deteriorated with extreme and exceptional drought ratings for the South Kohala and North Kona Districts. Voluntary and mandatory reductions were imposed on reservoir systems serving Agricultural parks operated by the Agricultural Resource Management (ARM) Division of the Hawaii State Department of Agriculture. Weather conditions were dominated by high winds and light precipitation. Additional amounts of irrigation water were required to maintain fruits and vegetables. Crops grown where irrigation water was not available suffered. Weight loss in some beef herds was noticeable due to short pasture forage, especially in leeward locations.

#### April - June

Heavy rainfall brought flash flood warnings in some areas in early April, but drought conditions continued to prevail. Vegetable planting schedules were delayed or modified due to dry conditions. Brisk winds continued to speed evaporation in pastures. Ranchers were concerned heading in to the

normally dry season of the year. Livestock required feeding and water hauling continued to be necessary in most areas. Stronger trade winds did not spawn showers until the middle of June, but winds and hot temperatures negated most positive effects of received precipitation. A mandatory 30 percent reduction in use with water service limited to Mondays, Wednesdays, and Fridays during the day was imposed on the Waimanalo Irrigation System which is operated by the Hawaii State Department of Agriculture in June. A mandatory 20 percent reduction in use was implemented for Molokai Agricultural Park non-homesteaders in June.

#### July – September

U.S. Department of Agriculture Secretary, Tom Vilsack declared all counties to be Primary Natural Disaster Areas on July 21, 2010. Secretary Vilsack's declaration was made amid heavy losses incurred by farmers and ranchers since the beginning of the year in one of the most severe droughts Hawaii has experienced. Coffee harvest began with growers concerned about the prevailing dry conditions especially in the Kona coffee growing region. Some mature protea trees were lost due to drought conditions. Hawaii County pastures below 1,500 feet experienced heavy loss of pasture forage. Irrigation water restrictions remained in force for the Molokai (non-homesteaders) and

Waimanalo agricultural park farmers.

#### October – December

In early October, beneficial rains fell in most areas. Pastures conditions stopped degrading but conditions varied by location. Record high temperatures were recorded with little rain during the latter portion of October as irrigation water restrictions continued to be in agricultural parks on Oahu and Molokai. Heavy rains fell on most windward and mountainous locations the final week of October. This wet weather pattern spilled into November as some farmers in areas of heavy rainfall mentioned concern about root rot if persistent rains continue. Some minor damage was reported from high winds. Some pastures showed some recovery from drought. Orchards benefited from increased showers and overall cooler temperatures. Supplemental feeding was still required by some cattle ranches. Cooler weather and wet weather patterns continued into December as pasture conditions continued to improve. Wet weather did not hinder vegetable growth or planting, cultivating, or harvesting activities. Heavy and soaking rains fell in December, but leeward slopes were rated in some stage of drought on December 21, 2010, by the U.S. Drought Monitor.

Source: National Weather Service, National Drought Mitigation Center, and Farm Service Agency.